

FROM HUBBLE'S NGSL TO ABSOLUTE FLUXES

Sara R. Heap, NASA's Goddard Space Flight Center, Greenbelt MD

Don Lindler, Sigma Space Corporation, Lanham, MD

ABSTRACT

Hubble's Next Generation Spectral Library (NGSL) consists of R~1000 spectra of 374 stars of assorted temperature, gravity, and metallicity. Each spectrum covers the wavelength range, 0.18-1.00 μ . The library can be viewed and/or downloaded from the website, <http://archive.stsci.edu/prepds/stisngsl/>. Stars in the NGSL are now being used as absolute flux standards at ground-based observatories. However, the uncertainty in the absolute flux is about 2%, which does not meet the requirements of dark-energy surveys. We are therefore developing an observing procedure that should yield fluxes with uncertainties less than 1% and will take part in an HST proposal to observe up to 15 stars using this new procedure.